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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,561	09/27/2001	Atsunari Tsuda	110373	2259

25944 7590 05/03/2005  
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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT PAPER NUMBER

2674

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/937,561

Applicant(s)

TSUDA, ATSUNARI

Examiner

Abbas I Abdulsalam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is a response to a communication filed on 12/19/04. Claims 1-14 are pending.

#### ***Response to Arguments***

2. Applicant's arguments see pages 1-2, filed on 12/19/04 with respect to the rejection(s) of claim(s) 1-14 under U.S.C. (103) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Keijiro (Japanese publication # 07-175429).

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Keijiro (Japanese publication # 07-175429).

Regarding claim 1, Keijiro teaches an electro-optical apparatus comprising: a display panel including a plurality of pixels in a display area and in a peripheral region around the display area, and a driver that drives driving each of the pixels of said display panel based on a display signal which is externally supplied (Fig. 1 (4, 40, 50), and under "DETAILED

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DESCRIPTION”, page 2, the whole third and fourth paragraphs) a timing detection device that detects timing to drive the pixels in the peripheral region of said display panel (Fig. 2 (71), and under “DETAILED DESCRIPTION”, the whole third and fourth paragraphs) ; and a display controller that outputs a signal to said driver at the timing detected by said timing detection device to always display during display operation the same color at pixels in the peripheral region regardless of color indicated for the pixels in the peripheral region by the externally supplied display signal (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 2, Keijiro teaches an electro-optical apparatus which comprising” a display panel comprising a plurality of pixels in a display area and in a peripheral region around the display area; and driver that drives each of the pixels based on display data which is externally supplied corresponding to each of the pixels of said display panel (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs), and a display controller that outputs to said driver mask to display each of the pixels in the peripheral region of said display panel in the same particular color regardless of color indicated for the pixels in the peripheral region by the externally supplied display data (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 3, Keijiro teaches an electro-optical apparatus which comprising a display panel comprising a plurality of pixels in a display area and in a peripheral region around

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the display area (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs); a memory which stores display data corresponding to each of the pixels of said display panel (Fig. 1 (25), and “DETAILED DESCRIPTION”, page 2, sixth paragraph, first sentence), a writing means device that writes to said memory display data which is externally supplied (under “DETAILED DESCRIPTION”, page 2, eight paragraph, write enable signal) , and a driver that drives each of said pixels based on the display data to always display during display operations each of the pixels in the peripheral region of said display a panel in the same particular color regardless of color indicated for the pixels in the peripheral region by the externally supplied display data (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 4, Keijiro teaches an electro-optical apparatus comprising a display panel including a plurality of pixels in a display area and in a peripheral region around the display area (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs); a memory which stores display data corresponding to each of the pixels of said display panel (Fig. 1 (25), and under “DETAILED DESCRIPTION”, page 2, sixth paragraph, first sentence), the memory including a storage area corresponding to each of the pixels in the peripheral region of said display panel, the storage area being stored mask data indicating the same particular color for all pixels of the peripheral region of the display panel (Fig. 2 (63, 65, 67) under “DETAILED DESCRIPTION”, page 6, second paragraph, the first six lines); a writing device that writes to said memory display data which is externally supplied

(under “DETAILED DESCRIPTION”, page 2, eight paragraph, write enable signal), and a driver that drives each of said pixels based on the display data and the mask data in said memory, so that each of the pixels in the peripheral region of said display panel are displayed in the same particular color regardless of color indicated for the pixels in the peripheral region by the externally supplied display data (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 5, Keijiro teaches each of the said pixels being formed of liquid crystal (under “DETAILED DESCRIPTION”, page 6, line 6, LCD panel).

Regarding claim 6, Keijiro teaches said particular color being white (Fig. 2 (69), and under “DETAILED DESCRIPTION”, page 7, last three lines of a fourth paragraph).

Regarding claim 7, Keijiro teaches a method of driving an electro-optical apparatus which includes a display panel including a plurality of pixels, and a driver that drives each of the pixels of said display panel based on a display signal which is externally supplied (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs), the method comprising detecting timing to drive the pixels in the peripheral region of said display panel (Fig. 2 (71), and under “DETAILED DESCRIPTION”, the whole third and fourth paragraphs); and outputting a signal to said driver at the selected timing to display the same color at pixels in the peripheral region regardless of color indicated for the pixels in the peripheral region by the externally supplied signal (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under

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“DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 8, Keijiro teaches a method of driving an electro-optical apparatus which includes a display panel including a plurality of pixels, and a driver that drives each of the pixels based on display data which is externally supplied corresponding to each of the pixels of said display panel (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs), the method comprising outputting display data to said driver to always display during display operations each of the pixels in the peripheral region of said display panel in the same particular color regardless of color indicated for the pixels in the peripheral region by the externally supplied display data (Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 9, Keijiro teaches a method of driving an electro-optical apparatus which includes a display panel including a plurality of pixels (Fig. 1 (4, 40, 50), and under “DETAILED DESCRIPTION”, page 2, the whole third and fourth paragraphs), a memory which stores display data corresponding to each of the pixels of said display panel (Fig. 1 (25), and under “DETAILED DESCRIPTION”, page 2, sixth paragraph, first sentence), writing device that writes to said memory display data which is externally supplied, and a driver that drives each of said pixels based on the display data in said memory (under “DETAILED DESCRIPTION”, page 2, eighth paragraph, write enable signal), the method comprising: writing

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mask data to said memory as display data for each of the pixels in the peripheral region of said display panel to display the same color at pixels in the peripheral region regardless of color indicated for the pixels by externally supplied display(Fig. 1 (18), Fig. 2 (61, 63, 65, 67), and under “DETAILED DESCRIPTION”, page 5, the last two lines and page 6, the whole first and second paragraphs).

Regarding claim 10, Keijiro teaches said writing step including writing display data to display a particular color that is white (Fig. 2 (69), and under “DETAILED DESCRIPTION”, page 7, last three lines of a fourth paragraph).

Regarding claim 11, Keijiro teaches the display controller outputs a signal to always display during display operations the pixels in the display area in colors indicated by externally supplied display signal (Fig. 1 (19) and (Fig. 2 (69), and under “DETAILED DESCRIPTION”, page 2, third paragraph, the first three sentences).

Regarding claim 12, Keijiro teaches the display controller stops outputting display data to said driver and enables transfer of the externally supplies display data to the driver to always display during display operations each of the pixels in the display area in the color indicated by the externally supplied display data (Fig. 2 (69), and under “DETAILED DESCRIPTION”, page 6, form the middle of second paragraph).



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Regarding claim 13, Keijiro teaches to the display control device writes to said memory display data to always display during display operation each of the pixels in the display area in the color indicated by the externally supplied display data (Fig. 1 (19), Fig. 2 (69), and under "DETAILED DESCRIPTION", page 6, form the middle of second paragraph).

Regarding claim 14, Keijiro teaches the driver drives each of said pixels so that each of the pixels in the display area is always displayed during display operations in the color indicated by the externally supplied display data (Fig. 1 (19), Fig. 2 (69), and under "DETAILED DESCRIPTION", page 6, form the middle of second paragraph).

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following arts are cited for further reference.

U.S. Pat. No. 6,674,436 to Dresevice.

5. Any inquiry concerning this communication or earlier communications form the examiner should be directed to Abbas I Abdulsalam whose telephone number is (571) 272-7685. The examiner can normally be reached on Monday through Friday form 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**PATRICK N. EDOUARD**  
**PRIMARY EXAMINER**

Abbas Abdulsalam

Examiner

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April 29, 2005